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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,497	10/30/2003	Stephen C. Suffin	CNSR-07141	8061

7590 07/20/2006

Peter G. Carroll
MEDLEN & CARROLL, LLP
Suite 350
101 Howard Street
San Francisco, CA 94105

EXAMINER

KIM, JENNIFER M

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/697,497	SUFFIN ET AL.	
	Examiner	Art Unit	
	Jennifer Kim	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 4-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/26/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 25, 2006 has been entered.

It is noted that claims 1-16 are pending; claims 4-16 are withdrawn from consideration because they are non-elected invention. Claims 1-3 are being examined.

Action Summary

The rejection of claims 1-3 of record under 35 U.S.C. 103(a) as being unpatentable over Quessy et al. (US 2002/0147196 A1) in view of Guay (The American Journal of Geriatric Pharmacotherapy, 2003) is hereby expressly withdrawn in view of Applicant's response. However, upon further consideration, a new ground(s) of rejection is made as follows:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term “derivatives” recited in claim 1 render the claims indefinite. Note that the specification fails to clearly define the recitation, “derivative(s)” of bupropion and fails to disclose structural formulas representing bupropion derivatives. One of ordinary skill in the art could not ascertain and interpret the metes and bounds of the patent protection desired as to “derivative(s)” of bupropion. One of ordinary skill in the art would clearly recognize that bupropion modified by many widely varying unrelated substituents could read on the “derivative(s)” of bupropion. Given the fact that any significant structural variation to the compound would be reasonably expected to alter its properties, e.g., physical, chemical physiological effects and functions of bupropion, the claims are unclear and indefinite as to the “derivative(s)” of bupropion encompassed herein.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quessy et al. (US 2002/0147196 A1) of record further in view of Zakrzewska et al. (#84, PTO-1449). (Journal of Neurology, Neurosurgery, and Psychiatry 1989) of record.

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Quessy et al. teach a pharmaceutical composition comprising **bupropion** and sodium channel blockers including **oxcarbazepine** and **lamotrigine** useful for the treatment of **neuropathic pain**. (page 5, claims 1-3). Quessy et al. illustrate the composition comprising **bupropion and lamotrigine** (page 5, Example 3, claim 6). Quessy et al. teach that using the test compound lamotrigine in a pre-clinical experiment, no adverse side effects were observed. ([0038]). Quessy et al. also teach that the composition can be formulated with **mixtures of NE-reuptake inhibitors which exert analgesic activity (analgesics)**. (page 1, [0009], [0010]). Quessy et al. further teach that the composition can be formulated as a **transdermal patch, sterile injectable solution, tablet, capsules, oral liquid or a sterile liquid for injection** and can be formulated with suitable **polymeric** materials. ([0021]-[0027]). Quessy et al. additionally teach that the composition manifests **synergism** in the treatment of neuropathic pain ([0009]). Quessy et al. lastly teach that there is a need for a pharmaceutical composition that can alleviate neuropathic pain or/its symptoms effectively. (page 1, [0004], [0007]).

However, Quessy et al.'s illustrated composition (example 3) uses lamotrigine with bupropion, rather than oxcarbazepine as instantly claimed.

Zakrzewska et al. teach that **oxcarbazepine** possesses **antineuralgic properties**, is effective in the management of intractable **trigeminal neuralgia**, and elicits an **excellent** therapeutic response in **controlling pain without side effects**. (abstract).

It would have been obvious to one of ordinary skill in the art to modify the composition of Quessy et al. by replacing lamotrigine with oxcarbazepine, because Quessy et al. teach that bupropion can be formulated with any one of disclosed sodium channel blockers including oxcarbazepine or lamotrigine, and because Quessy et al. teach that oxcarbazepine and lamotrigine are equivalents both having the anti-neuralgic properties for treating neuropathic pain in combination with bupropion. Further, Zakrzewska et al. also teach that oxcarbazepine has no side effects. One of ordinary skill in the art would be motivated to make such a modification with oxcarbazepine in order to fulfill the need of a pharmaceutical composition and providing variety for the treatment of neuropathic pain, not only possessing antineuralgic properties but also lacking side-effects as taught by Zakrzewska et al. There is a reasonable expectation of successfully treating neuropathic pain without side effects with a combination of bupropion and oxcarbazepine, the latter well taught by Zakrzewska et al. as possessing excellent antineuralgic properties with an excellent therapeutic response in controlling pain. With regard to further combining with a third drug as set forth in claim 2 and the specified formulation as set forth in claim 3, all deemed obvious because Quessy et al. teach that NE-reuptake inhibitors exert analgesic activity (analgesics) and, therefore, can be incorporated in the obvious combination and because the various formulations set forth in claim 3 are taught by Quessy et al. as suitable formulations for the obvious combination. One would have been motivated to further incorporate analgesics in a mixture to the combination in various formulations disclosed by Quessy et al. in order to successfully formulate an ultimate regimen for the treatment of neuropathic pain

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possessing at least one synergistic effect disclosed by Quessy et al. without a side effect. Absent any evidence to contrary, there would have been a reasonable expectation of successfully improving the anti-neuropathic pain composition of Quessy et al. by combining bupropion and oxcarbazepine in order to fulfill the need of a pharmaceutical composition that can alleviate neuropathic pain without as a side effect.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

None of the claims are allowed.

Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Kim whose telephone number is 571-272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Jennifer Kim', with a stylized flourish at the end.

Jennifer Kim
Patent Examiner
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Jmk
July 9, 2006